

Applicant respectfully submits that the final rejection dated September 18, 2001 is premature under MPEP § 706.07(c) because no ground of rejection was provided for independent claim 90 and claim 90 was not indicated as being allowable. Applicant notes that the Examiner indicated claim 90 to be allowable in the Office Action dated May 26, 1998. Applicant subsequently amended claim 90 to correct minor informalities as noted in the remarks of the reply dated November 23, 1998. Applicant respectfully requests the Examiner to withdraw the finality of the office action dated September 18, 2001 pursuant to MPEP § 706.07(d) and issue a non-final Office Action of the claims on the merits.

Independent claims 95 and 108 have been amended to further define Applicant's claimed invention.

Applicant's representatives wish to thank the Examiner for the courtesies extended during the telephonic interview of October 1, 2001. During the interview, the Examiner expressed concern that parts of the human anatomy were being claimed, though no such rejection was formally raised in the office action. Although Applicant disagrees with the Examiner's interpretation of the claims, independent claims 95 and 108 have been amended in view of the Examiner's expressed concern and to emphasize that no part of the human anatomy is being claimed.

In the Office Action, the Examiner allowed claims 102-107, 114, 115, 122, 123, 128, 131, 138, and 141-236. The Examiner rejected claims 95-101, 108-113, 116-121, 124-127, 129, 130, and 132-136 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,878,915 to Brantigan ('915) and rejected claim 137 as being unpatentable over Brantigan ('915) in view of U.S. Patent No. 4,772,286 to Goble et al. ('286).

Independent claims 95 and 108 recite that the "disc penetrating extension... adapted to be inserted into the lateral aspect of the disc space from a position anterior to the transverse processes of the adjacent vertebrae" has "a portion adapted to bear against each of the adjacent endplates of the adjacent vertebral bodies" and that the disc penetrating extension has "a length that is less than the transverse width of the vertebral bodies" and "greater than the depth" of the spinal disc or disc space intermediate the two adjacent vertebral bodies between which said disc penetrating extension is adapted to be inserted. Applicant submits that neither Brantigan '915, nor any other art of record, either alone or in proper combination, teaches, discloses or suggests the structure of Applicant's claimed invention.

Brantigan '915 discloses instrumentation for preparing an installation space from the posterior to anterior aspects of the vertebrae. In particular, Brantigan '915 discloses a drill guard (22) with teeth or prongs (23) penetrating and anchored in the posterior side of both vertebrae. (Col. 5, lines 41-45). Brantigan '915 discloses a tool assembly (24) having a stem (25) with a threaded end (26) mating with tapped hole (19) in end face (11a) of plug (11) and mounted in an easily grasped handle (27) at the opposite end. The plug (11) is mounted on the tool and the tool is manipulated to seat the plug on the prepared sites to be bottomed on the blind ends 16 of the sites 15. After positioning of the plug on the sites, the tool is detached from the plug. (Col. 6, lines 1-7).

Brantigan '915 does not disclose a "disc penetrating extension adapted to be inserted into the lateral aspect of the disc space from a position anterior to the

transverse processes of the adjacent vertebrae" having "a portion adapted to bear against each of the adjacent endplates of the adjacent vertebral bodies" or a "disc penetrating extension having a height less than the height of said body and a length that is less than the transverse width of the vertebral bodies" and "greater than the depth" of the spinal disc or disc space between which said disc penetrating extension is adapted to be inserted as recited in independent claims 95 and 108, respectively.

With respect to the Examiner's rejection of claim 137 under 35 U.S.C. § 103(a) as being unpatentable over Brantigan '915 in view of Goble '286, Applicant submits that the Examiner's rejection of this claim is rendered moot at least in view of the patentability of independent claim 108, which Applicant submits is in condition for allowance.

Applicant submits that independent claims 95 and 108 are allowable over Brantigan '915. Dependent claims 96-101, 109-113, 116-121, 124-127, 129, 130, and 132-137, are allowable at least due to their dependency from allowable independent claims 95 and 108, respectively. It is submitted that the rejection of claims 95-101, 108-113, 116-121, 124-127, 129, 130, and 132-136 under 35 U.S.C. § 102(b) as being anticipated by Brantigan '915 and the rejection of claim 137 under 35 U.S.C. § 103(a) as being unpatentable over Brantigan '915 in view of Goble '286 have been overcome.

In view of the foregoing remarks, it is respectfully submitted that claims 90 and 95-236 are patentable. Therefore, it is requested that the Examiner reconsider the outstanding rejections in view of the preceding comments. Issuance of a timely notice of allowance of the claims is earnestly solicited.

If there are any fees due in connection with the filing of this response, please charge our Deposit Account Number 50-1068. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for in the papers accompanying this response, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

MARTIN & FERRARO LLP

Date: March 18, 2002

14500 Avion Parkway, Suite 300
Chantilly, VA 20151-1101
Telephone: 703-679-9300
Fax: 703-679-9303

By:



Thomas H. Martin
Registration No. 34, 383
Attorney for Applicant

BOX AF
RESPONSE UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 3764

PATENT
102.0010-01000
Customer No. 22882

CHANGES TO THE CLAIMS

95. (Amended) A spinal distractor for use in spinal fusion surgery within an adult human thoracic and lumbar spine for positioning adjacent vertebral bodies of two adjacent vertebrae adjacent a disc space in selected relationship to each other, said spinal distractor comprising:

a body having a height adapted to be greater than the height of the disc space; and

at least one disc penetrating extension extending from said body ~~for insertion~~ adapted to be inserted into the lateral aspect of the disc space from a position anterior to the transverse processes of the adjacent vertebrae, said disc penetrating extension having a portion ~~for bearing~~ adapted to bear against each of the adjacent endplates of the two adjacent vertebral bodies, said portion of said disc penetrating extension having a height less than the height of said body and a length that is less than the transverse width of the vertebral bodies between which said disc penetrating extension is adapted to be inserted, said length being greater than the depth of the spinal disc intermediate the two adjacent vertebral bodies between which said disc penetrating extension is adapted to be inserted.

108. (Amended) An apparatus for use in human spinal surgery across the height of a disc space between the vertebral bodies of two adjacent vertebrae, said apparatus comprising:

a guard member having a height adapted to be greater than the height of the disc space and an opening for providing protected access to the lateral aspect of the disc space and the adjacent vertebral bodies from a position anterior to the transverse processes of the adjacent vertebrae, said opening having a maximum height; and

at least one disc penetrating extension extending from said guard member ~~for insertion~~ adapted to be inserted into the lateral aspect of the disc space from a position anterior to the transverse processes of the adjacent vertebrae, said disc penetrating extension having a portion ~~for bearing~~ adapted to bear against each of the adjacent endplates of the adjacent vertebral bodies, said portion of said disc penetrating extension having a height less than the height of said guard member and a length that is less than the transverse width of the vertebral bodies between which said disc penetrating extension is adapted to be inserted, said length being greater than the depth of the disc space in which said length is adapted to be inserted, said portion of said disc penetrating extension having an upper surface adapted to contact one of the adjacent endplates of the adjacent vertebral bodies and a lower surface adapted to contact the other of the adjacent endplates of the adjacent vertebral bodies at more than one point through the disc space.